

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SERIAL NO: (International Serial No. PCT/EP2004/007922)

FILED: (International Filing Date: 15 July 2004)

TITLE: FLOOR FOR AN AIRCRAFT CARGO COMPARTMENT AND METHOD
FOR THE ASSEMBLY THEREOF

Preliminary Amendment: CLAIM AMENDMENTS

1. (Currently Amended) Floor for a cargo compartment ~~(2)~~ of an aircraft, comprising
at least one panels or similar flat floor elements; (51, 51') ~~for the attachment of roller elements (11), ball elements (12), latches (13), PDUs (14) or similar functional units,~~
a functional unit for a cargo transportation means attached to said floor element; and
at least one floor beams (16) or similar supporting elements for supporting said at least one the floor elements (51, 51') and adapted for connection to a body or a skin (1) of the aircraft, characterized in that the said floor elements (51, 51') are being rigidly fixedly connected to the said at least one floor beam supporting elements (16) and thereby forming a to form prefabricated floor modules (50, 50') and the floor modules (50, 50') can be installed adapted for installation in the aircraft.

2. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein characterized in that the said functional units (11-14) are is mounted on said the floor beam element (51, 51') of the floor modules ~~(50, 50')~~.

3. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to Claim 1, wherein 2, characterized in that~~ at least one of an electrical control device and a electrical and/or mechanical control devices (20) for controlling said the functional units, in particular the PDUs (14), are provided and are is connected to said the functional units.

4. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to Claim 1, wherein 3, characterized in that a transmission sockets (21) or similar connecting devices for power transmission is are provided and attached to said the floor modules (50) in such a way that said transmission socket they can be connected to a complementarily correspondingly shaped transmission connectors provided on an adjacent floor module (50').~~

5. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein one of the preceding claims, characterized in that sections of at least one of cable channels (23), hydraulic conduits (25), water conduits (26), electrical leads (27) or and other similar conducting devices are provided in the floor modules (50) in and are adapted such a way that they can link to together with similar conducting devices in an adjacent floor modules (50') they to form an overall conducting systems when the floor modules are (50, 50') have been installed in the aircraft.

6. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to Claim 5, wherein characterized in that the conducting devices (23, 25-27) comprises branches (28)~~

that provide a connection to predetermined locations ~~prespecified places~~ on the floor elements ~~(51)~~ and/or the functional units ~~(11-14)~~.

7. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein one of the preceding claims, characterized by assembly elements are provided ~~(30)~~ on said the floor modules ~~(50)~~ or floor elements ~~(51)~~ to provide a mechanically secure connection to adjacent floor modules ~~(50')~~ or floor elements ~~(51')~~ during or after installation of said floor modules in the aircraft.
8. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein one of the preceding claims, characterized by said floor element defines at least one inspection and/or installation openings ~~(34)~~ in the floor elements ~~(51)~~ that is ~~can be~~ closed by a floor-element sections ~~(35)~~ and that is ~~are~~ provided to permit access to ~~make accessible~~ a bilge space ~~(4)~~ below said the floor elements ~~(51)~~.
9. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to~~ Claim 8, wherein characterized in that the floor-element sections ~~(35)~~ ~~can be~~ is fixed to said the floor elements ~~(51)~~ by means of a fast-action closure devices ~~(38)~~.
10. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said one of the preceding claims, characterized in that the floor elements ~~(51)~~ comprises a sealing devices ~~(40)~~ adapted to create a tight seal between a space defined above and a space defined below said the floor elements ~~(51)~~.

11. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein ~~one of the preceding claims, characterized by a~~ leakproof connecting elements ~~(43, 44)~~ is provided and is adapted for the leakproof connection of said ~~the~~ floor elements ~~(51)~~ to at least one of an adjacent floor elements ~~(51')~~ and/or to the said skin ~~(1)~~ of the aircraft.
12. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein ~~one of the preceding claims, characterized by a~~ drainage devices ~~(46)~~ is provided to conduct fluids out of the cargo compartment ~~(2)~~ and to transfer said ~~the~~ fluid into a corresponding drainage devices ~~associated with~~ of an adjacent floor modules ~~(50')~~.
13. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said ~~one of the preceding claims, characterized in that~~ the floor modules ~~(50)~~ comprises at least one floor panels ~~(52)~~ or similar surfaces on which a person ~~people~~ can walk.
14. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein ~~one of the preceding claims, characterized in that~~ the floor modules ~~(50)~~ comprises at least one insulation devices ~~(53)~~ adapted to insulate a lower portion ~~half~~ ~~(6)~~ of the fuselage of said aircraft.
15. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to~~ Claim 14, wherein said ~~characterized in that~~ the insulation devices ~~(53)~~ are is disposed below said ~~the~~ floor elements ~~(51)~~ and/or in the region of said ~~the~~ supporting beam elements ~~(16)~~ near the said skin ~~(1)~~ of said ~~the~~ aircraft.

16. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said ~~one of the preceding claims,~~ ~~characterized in that the~~ floor modules ~~(50)~~ comprises at least one of a ~~bulkheads or similar partitions (54)~~ and a ~~or~~ fixation devices ~~(55)~~ for the attachment of a bulkhead thereto ~~attaching partitions (54)~~.
17. (Currently Amended) Cargo-compartment floor according to ~~one of the preceding claims, in particular according to~~ Claim 16, wherein said bulkheads ~~characterized in that the~~ partitions ~~(54)~~ are comprised ~~made~~ at least in part of a ballistically-resistant material.
18. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said ~~one of the preceding claims,~~ ~~characterized in that the~~ floor modules ~~(50)~~ comprises at least one of an EE racks, ~~or a similar~~ mounting devices ~~(56)~~ for electronic components, and/or a fixation devices ~~(57)~~ for electronic components and a connecting devices for said electronic components.
19. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said ~~one of the preceding claims,~~ ~~characterized in that the~~ floor modules ~~(50)~~ comprises at least one of a water tanks ~~(58)~~, a ~~and/or~~ waste-water tanks, a ~~(59)~~ ~~and/or~~ fixation devices ~~(60)~~ ~~and/or~~ a connecting devices for said tanks.
20. (Currently Amended) Cargo-compartment floor according to Claim 1 , wherein said ~~one of the preceding claims,~~ ~~characterized in that the~~ floor modules ~~(50)~~ comprises at least one of a wall linings ~~and/or ceiling linings or similar lining elements (62)~~ and a ~~or~~ mounting

devices ~~(63)~~ for said elements, for lining the cargo compartment ~~(2)~~.

21. (Currently Amended) Cargo-compartment floor according to Claim 1, wherein said ~~one of the preceding claims,~~ characterized in that the floor modules ~~(50)~~ are constructed and are fastened to said ~~the~~ skin ~~(1)~~ of the aircraft in such a way that after installation in the aircraft they can be removed again in an arbitrary sequence.

22. (Currently Amended) Method for assembly of a floor for a cargo-compartment of an aircraft, comprising the following steps:
 - providing a floor element;
 - providing a floor beam adapted for connection to a skin of the aircraft;
 - attaching said ~~attachment of a panels or similar~~ flat floor elements, which are provided for the fixation of roller elements, ball elements, latches, PDUs or similar functional units to said floor beams ~~or to similar supporting elements provided to support the floor elements and to be connected to a body or a skin of the aircraft, so~~ such that the floor elements together with the supporting elements form a prefabricated floor modules that can be handled as a unit;
 - lifting said ~~a~~ floor module into said ~~the~~ cargo compartment;
 - fastening said the floor beam ~~supporting elements~~ to said ~~the body or~~ skin of the aircraft; and
 - ~~repetition~~ repeating said ~~of the~~ above steps until the floor of the cargo compartment has been completed.

23. (Currently Amended) Method according to Claim 22, comprising the additional step of ~~characterized by the~~

~~step~~ mounting a functional unit for a cargo transportation means ~~the functional units~~ on the floor element before the latter is lifted into the cargo compartment.

24. (Currently Amended) Method according to ~~one of the Claims 22 wherein or 23, characterized by~~ a connecting step ~~that~~ follows the step of lifting into the cargo compartment ~~and~~ in which at least one of
- control devices to control ~~the~~ functional units;
conduction devices such as cable channels, hydraulic conduits, water conduits, electrical leads and ~~or~~ similar conduction devices; ~~and/or~~
- drainage devices for ~~to~~ conducting fluids out of the cargo compartment are connected to corresponding control devices, conducting devices and drainage devices associated with an adjacent floor module that has been fixed within the cargo compartment.
25. (Currently Amended) Method according to ~~one of the Claims 22-24, wherein in particular according to Claim 24, characterized in that~~ at least parts of the connecting step is ~~are~~ performed prior to the final fixation of the supporting elements to said ~~the body or the~~ skin of the aircraft.